11/13/06

```
Set     Items   Description
S1      70203   (MANUFACTUR? OR MASS()PRODUC? OR ASSEMBL? OR CONFIGUR? OR -
             FABRICAT? OR CONSTRUCT?)(3N)(COMPUTER? OR DESKTOP? OR COMPONE-
             NT? OR SCANNER? OR PRINTER? OR PERIPHERAL?)
S2       7184   (MANUFACTUR? OR MASS()PRODUC? OR ASSEMBL? OR CONFIGUR? OR -
             FABRICAT? OR CONSTRUCT?)(3N)(MONITOR? OR CPU? ? OR CRT? ? OR -
             HARDDISK? OR HARDDISC? OR HARD()(DISK? OR DISC?))
S3     262261   (MANUFACTUR? OR MASS()PRODUC? OR ASSEMBL? OR CONFIGUR? OR -
             FABRICAT? OR CONSTRUCT?)(3N)((DISK? OR DISC?)()(STOR? OR DRIV-
             E?) OR DESK()TOP? ? OR UNIT? ? OR MODULE? OR EQUIPMENT? OR AP-
             PARATUS? OR DEVICE?)
S4     327541   S1:S3
S5       5470   DATABASE? OR DATAFILE? OR DATAREPOSITOR? OR DATABANK? OR DB
              OR DATA?()(BASE? OR FILE? OR REPOSITOR? OR BANK? OR STORAG? -
             OR RECORD? OR SYSTEM?)
S6     206252   INFO? OR INFORMAT? OR DATA? ? OR TEMPLAT? OR PROTOTYP? OR -
             BETA? OR DRAWING? OR REPRESENTAT? OR PLANS OR GRAPHIC?
S7      39785   PLURAL? OR MULTIP? OR MULTIT? OR SEVERAL? OR MORE(2W)ONE OR
              MANY OR NUMEROUS?
S8      84069   EACH? OR SPECIFIC? OR PARTICULAR? OR DISTINCT? OR SINGULAR?
              OR UNIQUE? OR PRECISE?
S9       7364   DEVELOPMENT? OR EVOLUTION? OR ACCUMULAT? OR CUMULAT? OR AG-
             GLOMERAT? OR OCCURREN? OR PROGRESSION? OR ADVANCEMENT?
S10     39144   STAGE? OR PHASE? OR INTERATION? OR LEVEL? OR TIER? OR LEG?
             ? OR MODEL? ? OR PERMUTATION? OR VARIATION?
S11      6298   SHARE? OR SHARING OR INTERACT? OR SYMBIO? OR PARTICIPAT? OR
              CONTRIBUT? OR SOLICIT? OR ELICIT? OR BACK(2W)FORTH?
S12     44850   INPUT? OR INSERT? OR INITIAT? OR INTRODUC?
S13     42247   AMEND? OR CHANGE? OR CHANGING? OR MODIF? OR TRANSFORM? OR -
             ALTER? OR ADAPT?
S14      2844   UPDAT? OR EDIT??? OR RECONFIGUR?
S15     24429   OUTSIDE? OR EXTERNAL? OR EXTRINSIC? OR EXTERIOR? OR SUBCON-
             TRACT?
S16     13708   VENDOR? OR SUPPLIER? OR MANUFACTURER? OR PARTY? OR PARTIE?
             OR DEPARTMENT? OR INDIVIDUAL? OR CLIENT? OR WORKER?
S17     14318   CUSTOMER? OR USER? OR PATRON? OR ENDUSER?  OR PRINCIPAL?
S18     18880   RELEVAN? OR PERTINEN? OR INTERESTED? OR COMMITTED? OR RELA-
             TED? OR AFFILIAT? OR ASSOCIAT? OR AUXILIAR?
S19     20426   IC=G06F?
S20     29136   MC=T01?
S21      4610   S4 AND S5:S6 AND S7:S8 AND S9:S10 AND S11:S14
S22      1462   S21 AND S19:S20
S23      4610   S21:S22
S24        34   S23 AND S7:S8(5N)S9:S10 AND (S7 OR S15 OR S18)(7N)S16:S17
S25        21   S23 AND S11:S12 AND S13:S14 AND S5 AND S6 AND S8:S9(5N)S10
S26        60   S23 AND S16:S17 AND S7:S9(5N)S10 AND S11:S14(5N)S9:S10
S27        12   S4 AND S5 AND S6 AND (S7:S8 OR S15)(5N)(S9:S10 OR S16:S17)
             AND S11:S12 AND S13:S14(5N)S9:S10
S28       107   S24:S27
S29     34782   PR=2000:2006
S30        90   S28 NOT S29
S31        90   IDPAT (sorted in duplicate/non-duplicate order)
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200602
         (c) 2006  Thomson Derwent
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Set     Items   Description
S1     242815   (MANUFACTUR? OR MASS()PRODUC? OR ASSEMBL? OR CONFIGUR? OR -
             FABRICAT? OR CONSTRUCT?)(3N)(COMPUTER? OR DESKTOP? OR COMPONE-
             NT? OR SCANNER? OR PRINTER? OR PERIPHERAL?)
S2      15170   (MANUFACTUR? OR MASS()PRODUC? OR ASSEMBL? OR CONFIGUR? OR -
             FABRICAT? OR CONSTRUCT?)(3N)(MONITOR? OR CPU? ? OR CRT? ? OR -
             HARDDISK? OR HARDDISC? OR HARD()(DISK? OR DISC?))
S3     439060   (MANUFACTUR? OR MASS()PRODUC? OR ASSEMBL? OR CONFIGUR? OR -
             FABRICAT? OR CONSTRUCT?)(3N)((DISK? OR DISC?)()(STOR? OR DRIV-
             E?) OR DESK()TOP? ? OR UNIT? ? OR MODULE? OR EQUIPMENT? OR AP-
             PARATUS? OR DEVICE?)
S4     632177   S1:S3
S5      24432   DATABASE? OR DATAFILE? OR DATAREPOSITOR? OR DATABANK? OR DB
              OR DATA?()(BASE? OR FILE? OR REPOSITOR? OR BANK? OR STORAG? -
             OR RECORD? OR SYSTEM?)
S6     158856   INFO? OR INFORMAT? OR DATA? ? OR TEMPLAT? OR PROTOTYP? OR -
             BETA? OR DRAWING? OR REPRESENTAT? OR PLANS OR GRAPHIC?
S7      79890   PLURAL? OR MULTIP? OR MULTIT? OR SEVERAL? OR MORE(2W)ONE OR
              MANY OR NUMEROUS?
S8      98980   EACH? OR SPECIFIC? OR PARTICULAR? OR DISTINCT? OR SINGULAR?
              OR UNIQUE? OR PRECISE?
S9      85335   DEVELOPMENT? OR EVOLUTION? OR ACCUMULAT? OR CUMULAT? OR AG-
             GLOMERAT? OR OCCURREN? OR PROGRESSION? OR ADVANCEMENT?
S10    134865   STAGE? OR PHASE? OR INTERATION? OR LEVEL? OR TIER? OR LEG?
             ? OR MODEL? ? OR PERMUTATION? OR VARIATION?
S11     40856   SHARE? OR SHARING OR INTERACT? OR SYMBIO? OR PARTICIPAT? OR
              CONTRIBUT? OR SOLICIT? OR ELICIT? OR BACK(2W)FORTH?
S12     58838   INPUT? OR INSERT? OR INITIAT? OR INTRODUC?
S13     96662   AMEND? OR CHANGE? OR CHANGING? OR MODIF? OR TRANSFORM? OR -
             ALTER? OR ADAPT?
S14     24670   UPDAT? OR EDIT??? OR RECONFIGUR?
S15     12813   OUTSIDE? OR EXTERNAL? OR EXTRINSIC? OR EXTERIOR? OR SUBCON-
             TRACT?
S16     61593   VENDOR? OR SUPPLIER? OR MANUFACTURER? OR PARTY? OR PARTIE?
             OR DEPARTMENT? OR INDIVIDUAL? OR CLIENT? OR WORKER?
S17     36923   CUSTOMER? OR USER? OR PATRON? OR ENDUSER?  OR PRINCIPAL?
S18     73523   RELEVAN? OR PERTINEN? OR INTERESTED? OR COMMITTED? OR RELA-
             TED? OR AFFILIAT? OR ASSOCIAT? OR AUXILIAR?
S19     17207   S4 AND S5:S6 AND S7:S8 AND S9:S10 AND S11:S14
S20        98   S19 AND S7(5N)S9:S10 AND (S7 OR S15 OR S18)(7N)S16:S17
S21        82   S19 AND S11:S12 AND S13:S14 AND S5 AND S6 AND S8:S9(5N)S10
S22       248   S19 AND S16:S17 AND S8:S9(5N)S10 AND S11:S14(5N)S10
S23       409   S20:S22
S24       263   S23 AND PY<2000
S25       229   RD  (unique items)
File   2:INSPEC 1898-2006/Dec W3
         (c) 2006 Institution of Electrical Engineers
File   6:NTIS 1964-2006/Jan W1
         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2006/Jan W1
         (c) 2006 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2006/Jan W2
         (c) 2006 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/Dec
         (c) 2005 ProQuest Info&Learning
File  65:Inside Conferences 1993-2006/Jan W2
         (c) 2006 BLDSC all rts. reserv.
File  94:JICST-EPlus 1985-2006/Oct W5
         (c)2006 Japan Science and Tech Corp(JST)
File  99:Wilson Appl. Sci & Tech Abs 1983-2006/Dec
         (c) 2006 The HW Wilson Co.
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File 111:TGG Natl.Newspaper Index(SM) 1979-2006/Jan 11
(c) 2006 The Gale Group
File 144:Pascal 1973-2006/Dec W3
(c) 2006 INIST/CNRS
File 239:Mathsci 1940-2005/Feb
(c) 2005 American Mathematical Society
File 256:TecInfoSource 82-2005/Feb
(c) 2005 Info.Sources Inc
?

113/68

31/3,K/58
DIALOG(R)File 350:Derwent WPIX
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012597965 **Image available**
WPI Acc No: 1999-404071/199934
XRPX Acc No: N99-301109
Data **management controller in file and** database **management system for IC designing**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: MUELLER J L; VAN HUBEN G A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5920873	A	19990706	US 96761463	A	19961206	199934	B

Priority Applications (No Type Date): US 96761463 A 19961206
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5920873	A		400	G06F-017/00	

Data **management controller in file and** database **management system for IC designing**

Abstract (Basic):
... The **data** and control **information** are tracked in architecturally centralized location using PFVL paradigm. The controller provides dynamic bill of materials tracker to identify all desired pieces of design at **particular** library, **level** and variance to build a **model** .
... Control repository comprising common access interface and one or more **database** communicates with **users** and corresponding **data repositories** for fulfilling the **user** request through **data** managers ...

...In file and **data** management system for designing **development** and **manufacture** of IC and **computer** system...

...Since the controller provides dynamic BOM tracker, all desired pieces of design at **particular** library, **level** and variance to build a **model** are identified. The controller provides continuous tracking of created **model** while allowing the **user** to **modify** it by adding components, deleting components, **changing** the status of **model** and allowing promotion of **model** in **data** processing system through their libraries...

...DESCRIPTION OF **DRAWING** (S...
...The figure shows the design control system **level** structure with versions...
Title Terms: **DATA** ;
International Patent Class (Main): **G06F-017/00**
Manual Codes (EPI/S-X): **T01-J**

31/3,K/59
DIALOG(R)File 350:Derwent WPIX

012578905 **Image available**
WPI Acc No: 1999-385012/199932
XRPX Acc No: N99-288365

Hyperstructure variables modeling method for distributed on-line analytical processing system

Patent Assignee: WHITELIGHT SYSTEMS INC (WHIT-N)
Inventor: BRILL M L; POUSCHINE N; STROSS K G
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5918232	A	19990629	US 97978168	A	19971126	199932	B

Priority Applications (No Type Date): US 97978168 A 19971126
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5918232	A		36	G06F-017/30	

Abstract (Basic):
... Independent dimensions with at least one element are **constructed** from **computer data** within a hyperstructure. Cells are created which store at least one value and at least...
...associated with one cell. A domain modeling rule set is prepared to cause a physical **transformation** of **data** corresponding to physical objects which are modeled in hyperstructure.
... to be modeled in the hyperstructure is obtained before constructing independent dimensions. The measurements are **transformed** into computer **data** . At least one rule domain is associated with one cell. An INDEPENDENT CLAIM is also included for method of querying multidimensional computer modeling **data** structure...

...Reduces set-up time for making the **model** and reduces effort and storage requirements as pre-calculation of all **data** cell is not required. Although large number of **users** can be supported and **data** is easily **shared** between **models** , access is restricted and regulated in a secured manner. It is possible to create very complex **models** of **many** dimensions, thereby allowing decisions to be made on the basis of great number of variables...

...DESCRIPTION OF **DRAWING** (S...
International Patent Class (Main): **G06F-017/30**
Manual Codes (EPI/S-X): **T01-J05B**

31/3,K/61
DIALOG(R)File 350:Derwent WPIX

012383850 **Image available**
WPI Acc No: 1999-189957/199916
XRPX Acc No: N99-138987
Database **access management system for electronic** component **designing and** manufacture
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: MCDONALD D J; MUELLER J L; SIEGEL M S; VAN HUBEN G A; WARNOCK T B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5878408	A	19990302	US 96761253	A	19961206	199916	B

Priority Applications (No Type Date): US 96761253 A 19961206
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5878408	A		73	G06F-017/30	

Database **access management system for electronic** component **designing and** manufacture

Abstract (Basic):
... The automated processing of any application program or tool library **data** obtained from **data input** from management controller is performed using ALMs by a library manager. The processed result is ...
... Various project representing repository **data** for each record and common access interface is managed by a management unit. The control repository **data** is communicated to other users based on their validity of requests through process manager. During library processing, library **initiated** processing and designer **initiated** processing are performed dependently or independently within homogeneous or multiple computer platforms. The processed results...

...For electronic **component** designing in **manufacture** of complex electronic **equipments** like computer...

...Enables execution of designing process by **several users** simultaneously through distributed network. The **modification** of created **model** is simplified according to user's wish by performing library processing. The throughput is raised by transferring only the specific task **data** even though the design is complex. As the project control **information** is segregated by library, the work load of user during repetitive access is reduced...

...DESCRIPTION OF **DRAWING** (S...
Title Terms: **DATABASE** ;

31/3,K/65
DIALOG(R)File 350:Derwent WPIX

011822722 **Image available**
WPI Acc No: 1998-239632/199821
XRPX Acc No: N98-189577
Quality system implementation simulator - involves applying configured quality model **to product flow** data **and displaying results of quality assurance measures, on product flow, on screen**
Patent Assignee: KEANE J A (KEAN-I)
Inventor: KEANE J A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5737581	A	19980407	US 95520870	A	19950830	199821	B

Priority Applications (No Type Date): US 95520870 A 19950830
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5737581	A		21	G06F-009/44	

... **involves applying configured quality** model **to product flow** data **and displaying results of quality assurance measures, on product flow, on screen**
...Abstract (Basic): The process for simulating the implementation of a quality system on a business involves **inputting** a selection of quality assurance measures of the quality system. A quality **model** is **configured** within the **computer** system according to the selection to form a configured quality **model** .
...

...The configured quality **model** has a mathematical **representation** fo **each** quality assurance measure selected. Product flow **data** representing the product flow is **input** . The configured quality **model** is applied to the product flow **data** . Results of the quality assurance measures on the product flow are displayed on a **user** interface as determined by applying the configured quality **model** .
...

...to practise and experiment with quality system without attendant risks. May be augmented with other **models** such as accounting, consumer, financial, and macroeconomic **models** to enhance realism
...Title Terms: **MODEL** ;
International Patent Class (Main): **G06F-009/44**
International Patent Class (Additional): **G06F-009/445**
Manual Codes (EPI/S-X): **T01-J05A2** ...
... **T01-J15H** ...

... **T01-S01B**

31/3,K/70
DIALOG(R)File 350:Derwent WPIX

010504890 **Image available**
WPI Acc No: 1996-001841/199601
XRPX Acc No: N96-001589
Plant simulator - has simulation computer which unifies simulation models for all constituent members to output simulation result
Patent Assignee: MITSUBISHI JUKOGYO KK (MITO)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7261654	A	19951013	JP 9451594	A	19940323	199601	B

Priority Applications (No Type Date): JP 9451594 A 19940323
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7261654	A		4	G09B-009/00	

... **has simulation computer which unifies simulation** models **for all constituent members to output simulation result**

...Abstract (Basic): The plant simulator uses CAD (12) using which a **data** entry part (11) is operated. The simulator is furnished with a simulation computer (1). The systematic **representation** of the plant is carried out using the CAD. Then, a connection **data file** (B) is automatically generated pertaining to the connection **configuration** of the **equipments** that constitute that part...

...Based on attribute **data** (14) obtained as **input** for **each** constituent member, automatic generation of an attribute **data file** (16) is effected. The two **data files** stored in the memory, are sent to the computer. The computer using the **data files** and expression **models** (18a,18b) built for **each** constituent member, performs simulation calculation. Consequently, simulation result (19) is output from that computer...

...ADVANTAGE - Enables simulation **model** to be varied easily according to **change** in plant. Reduces time required for effecting **changes** in simulation **model** .

...Title Terms: **MODEL** ;
...International Patent Class (Additional): **G06F-017/00** ...

... **G06F-017/50**
Manual Codes (EPI/S-X): **T01-J15A3** ...

31/3,K/75
DIALOG(R)File 350:Derwent WPIX

009443176 **Image available**
WPI Acc No: 1993-136693/199317
XRPX Acc No: N93-104272

Programmable controller for industrial equipment - includes processor module with memory contg. states of various appts. being controlled and governs device operation w.r.t. stored ladder logic control program

Patent Assignee: ALLEN BRADLEY CO (ALLB)
Inventor: PIETRZYK A P; SCHULTZ M E; STERMOLE J A; ZINK S M
Number of Countries: 003 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2260829	A	19930428	GB 9211640	A	19920602	199317	B
US 5265004	A	19931123	US 91776917	A	19911015	199348	
GB 2260829	B	19950111	GB 9211640	A	19920602	199505	

Priority Applications (No Type Date): US 91776917 A 19911015
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2260829	A		50	G05B-019/05	
US 5265004	A		19	G05B-011/01	
GB 2260829	B		2	G05B-019/05	

...Abstract (Basic): processor which repeatedly executes instructions of a stored control program to examine the status of **input** devices, and to operate output devicdes w.r.t. such status, and conductors coupled to the processor for carrying **data** and control signals. A first storage device holds **data** regarding **each** step in a machine control process, with the **data** comprising: states for the output devices, a designation of other steps in the process to which a transition may occur, and **data** defining a Boolean logic expression specifying the states of **inputs** which must exist for a transition to occur to another designated step. A second memory...

...step. a first logic device detects the truth of a Boolean logic expression defined by **data** received from the first memory, and in response. The second memory is loaded with an...

...Abstract (Equivalent): processor for repeatedly executing instructions of a stored control program to examine the status of **input** devices operatively connected thereto, and to operate output devices operatively connected thereto in accordance with the status of the **input** devices: the programmable controller further including a) conductors coupled to the processor for carrying **data** and control signals; b) a first means, coupled to the conductors, for storing **data** regarding **each** step in a machine control process with the **data** for **each** step comprising states for the output devices, a designation of other steps in the process to which a transition may occur, and **data** defining a Boolean logic expression specifying the states of a **plurality** of **inputs** which must exist in order for a transition to occur to one of the other...

...e) a first means for detecting the truth of a Boolean logic expression defined by **data** received from said first means for storing; and f) means, responsive to said means for...

...Abstract (Equivalent): The controller includes a state machine instruction. A memory is provided for storing **data** regarding **each** state of an apparatus being controlled. This **data** defines the status of apparatus operating devices for **each** state, and the legitimate

transitions from that state to other selected states, along with a Boolean logic expression of selected **input** conditions which determines when a state transition should occur...

...the detected true expression. State transitions also can be defined as occurring upon a specified **change** in the status of a single **input** . Other mechanisms are provided to detect illegitimate states of the apparatus and take appropriate action...

...USE/ADVANTAGE - For operating of industrial **equipment** such as **assembly** lines and machine tool according to stored program. Enabled transition to occur from **each** **stage** to one of **multiple** possible **stages** defined by **user** .

Manual Codes (EPI/S-X): **T01-E02** ...

... **T01-J07**

31/3,K/85
DIALOG(R)File 350:Derwent WPIX

008449301 **Image available**
WPI Acc No: 1990-336301/199045
XRPX Acc No: N90-257222
Operating programme selection for automatic machining system - combines normal position variation data **for different workpieces with machining cycle for** each **machining station**
Patent Assignee: NISSAN MOTOR CO LTD (NSMO)
Inventor: KIKUCHI E; NISHIYAMA T
Number of Countries: 003 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4013617	A	19901031	DE 4013617	A	19900427	199045	B
GB 2233122	A	19910102	GB 909493	A	19900427	199101	
US 5161101	A	19921103	US 90513706	A	19900425	199247	
GB 2233122	B	19930922	GB 909493	A	19900427	199338	
DE 4013617	C2	19950824	DE 4013617	A	19900427	199538	

Priority Applications (No Type Date): JP 89107794 A 19890428; JP 89107793 A 19890428
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5161101	A		13	G06F-015/46	
DE 4013617	C2		12	G05B-019/418	
GB 2233122	B			G05B-019/417	

... **combines normal position** variation data **for different workpieces with machining cycle for** each **machining station**

...Abstract (Basic): The programme selection is effected by entering the normal positioning **data** and the required machining cycle for **each** of the separate machining stations, the actual normal positions for the latter measured for different types of workpiece for comparison with the entered **data** to obtain **individual variation data** .
...

...machining the selected workpiece and their normal positions are corrected in dependence on the latter **variation data** , to allow the machining programme for **each** station to be determined in combination with the entered machining cycle
...Abstract (Equivalent): A method of operating an **assembly apparatus** which comprises respective automatic machines by forming operation programs used in operating the automatic machines for a number of kinds of work, the automatic machines having the same **specifications** and **individual variations** , and **each** automatic machine including at least one function element for operating on the number of kinds of work, the method comprising the steps of: (a) **inputting** normal position **data** and operation pattern **data** into a main computer, the normal position **data** specifying a predetermined normal position at which the function elements of the automatic machines are to operate for **each** of the kinds of work, the operation pattern **data** specifying a predetermined pattern of operation of the automatic machines for **each** of the kinds of work; (b) measuring actual normal positions at which the function elements of respective automatic machines operate actually for **each** of the kinds of work; (c) providing **individual variation data** specifying deviations of the measured actual normal positions from the respective predetermined

normal positions for **each** of the kinds of work; (d) **inputting** the **individual variation data** into the main computer; (e) selecting one of the automatic machines; (f) selecting one of the kinds of work; (g) correcting the predetermined normal position **data** related to the selected automatic machine and the selected kind of work based on the **individual variation data related** to the selected automatic machine and the selected kind of work; (h) **inputting** accomplished **data** obtained empirically for **each** of the kinds of work, the accomplished **data** specifying correction factors by which the respective predetermined normal positions should be shifted to provide an improved operation accuracy to the automatic machines; (i) **modifying** the corrected normal position **data based** on the accomplished **data** ; (j) combining the **modified** normal position **data** with the operation pattern **data** related to the selected automatic machine and the selected kind of work to form an...

...Abstract (Equivalent): The method of forming operation programs used in operating respective automatic machines having the same **specifications** and **individual variations** involves employing normal position **data** specifying set normal positions at which the respective automatic machines are to operate and operation pattern **data** specifying a set pattern of operation of the automatic machines. Actual normal positions at which the respective automatic machines operate actually are measured to form **individual variation data** specifying deviations of the measured actual normal positions from the respective predetermined normal positions. The normal position **data** are corrected based on the **individual variation data** . The corrected normal position **data** are combined with the operation pattern **data** to form operation programs required for controlling the respective automatic machines...

...Title Terms: **VARIATION** ;

...International Patent Class (Main): **G06F-015/46**

25/3,K/183 (Item 22 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01384086 ORDER NO: AAD94-30654
TOODM - A TEMPORAL OBJECT-ORIENTED DATA MODEL **AND QUERY LANGUAGE**
Author: ROSE, ELLEN ANN
Degree: PH.D.
Year: **1993**
Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, BERKELEY (0028)
Source: VOLUME 55/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 2860. 199 PAGES

TOODM - A TEMPORAL OBJECT-ORIENTED DATA MODEL **AND QUERY LANGUAGE**
Year: **1993**

A temporal, object-oriented **data model** (TOODM) and query language (TOOSQL) are developed and implemented in this dissertation. TOODM can handle complex **data** structures and temporal semantics which can't be dealt with easily in relational **data models** which are inadequate in handling applications such as **Computer** Integrated **Manufacturing** (CIM), Medical Histories, Legal Histories, and Econometric **Models** which require time-series **data** and the capability of modeling **many** relationships between the **data** points as functions of time. Building this functionality into the **data model** means writing fewer application programs to manipulate the **data** thereby lessening maintenance time to **update** the system.

This **model** incorporates temporal and dynamic properties of real world objects through the addition of new structural primitives and constraints to a basic object-oriented **model** . The resulting **data model** supports the **specification** and enforcement of explicit constraints; past, present and future states of objects; type and instance histories using the time sequence, TS($O\sb{i}$) construct; different **user** views of a type using Meta-Types; retroactive/proactive **updates** and instance histories using the time sequence, TS($O\sb{i}$) construct; different **user** views of a type using Meta-Types; retroactive/proactive **updates** and queries using TOOSQL, a temporal, object-oriented SQL-based query language; **multiple** time lines; corrections without **information** loss; an algebra for optimizing query execution; a mapping to the relational **model** and a calculus to formalize the **specification** and manipulation of the **model** .

In Chapter 2, previous work is reviewed in the framework of how it **contributes** to this thesis. Chapter 3 discusses TOODM's assumptions and functionality, presents an illustrative example in the manufacturing management area and defines notations. The structures, operators and constraints are **introduced** along with the **data** definition language. The **data** manipulation language (DML) is discussed in Chapter 4. Chapter 5 gives the theoretical foundation in...
...TOODM and TOOSQL by mapping the type definitions of TOODM to those of the relational **model** and by mapping the TOOC to Relational Calculus. Chapter 7 discusses issues involved in a **prototype** implementation as an extension of POSTGRES v4r1. The POSTGRES monitor was replaced with a **graphical** front-end and **modifications** were made to support TOOSQL queries to TOODM **data** structures stored as POSTGRES relations. Performance, object storage and indexing improvements are relegated to future...

25/3,K/150 (Item 40 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01917400 E.I. Monthly No: EIM8512-084674
Title: USER **INTERFACE: CONCEPTS AND** SPECIFICATIONS .
Author: Spliid, Axel Monrad; Sorgen, Amos
Corporate Source: Technical Univ of Denmark, Control Engineering Section, Lyngby, Den
Conference Title: EUROGRAPHICS '84, Proceedings of the European Graphics Conference and Exhibition.
Conference Location: Copenhagen, Den Conference Date: 19840912
E.I. Conference No.: 07326
Source: Publ by North-Holland, Amsterdam, Neth and New York, NY, USA p 329-338
Publication Year: 1984
ISBN: 0-444-87617-0
Language: English

Title: USER **INTERFACE: CONCEPTS AND** SPECIFICATIONS .
Abstract: A CAD/CAM/CAE system may be very powerful, but its acceptance among a **user** group depends heavily on its **User** Interface. In the **development** of SEDA - System for Engineering Design and Analysis - the **User** Interface problematics were studied carefully, and great emphasis was put into the **development** of SEDA's **User** Interface. The basic building blocks in the **input** process - like a key stroke on the key board or a light pen interrupt - are hierarchically composed into tokens and higher syntax constructs. Five basic processes are present at **each level** in the hierarchy: Prompting, echoing, **input** interpretation, **information** transmission to a higher **level** and error handling. 3 refs.
Descriptors: *COMPUTER AIDED DESIGN; **COMPUTER** AIDED **MANUFACTURING** ; **COMPUTER** SYSTEMS, DIGITAL...

... **Interactive** Operation; COMPUTER INTERFACES; COMPUTER **GRAPHICS** --...

... **Interactive** ; SYSTEMS SCIENCE AND CYBERNETICS
Identifiers: CAD/CAM/CAE SYSTEM; **USER** INTERFACE; HIERARCHICAL STRUCTURE ; SYNTAX CONSTRUCTS; TOKENS; SEDA PROJECT

25/3,K/182 (Item 21 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01403842 ORDER NO: AADAA-I9509661
MANUFACTURING TEST SIMULATOR, A CONCURRENT ENGINEERING TOOL FOR BOARDS AND MULTI-CHIP MODULES

Author: TEGETHOFF, MAURO VIANA
Degree: PH.D.
Year: **1994**
Corporate Source/Institution: COLORADO STATE UNIVERSITY (0053)
Source: VOLUME 55/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 5010. 331 PAGES

Year: **1994**

This dissertation discusses a board and Multi-Chip **Module** (MCM) **Manufacturing** Test SIMulator (MTSIM). MTSIM is a concurrent engineering tool used to simulate the manufacturing test...

...select assembly process, specify Design For Test (DFT) features, select board test coverage, specify Application **Specific** Integrated Circuit (ASIC) defect **level** goals, establish product feasibility, and predict manufacturing quality and cost goals.

MTSIM **models** solder faults, **manufacturing** workmanship faults, **component** performance faults and reliability faults. Fault probabilities for the board are estimated based on the component type, **component** functionality and the **assembly** process used. Up to seven manufacturing test steps can be simulated. Test coverage **models** will support all currently used manufacturing test methodologies, including visual inspection, in-circuit test, IEEE 1149.1 boundary scan, selftest, diagnostics and burn-in.

A new yield **model** for boards and MCMs which accounts for the clustering of solder defects is **introduced** and used to predict the yield at **each** test step. In addition, MTSIM estimates the average number of defects per board detected at **each** test step, and estimates costs incurred in test execution, fault isolation and repair.

MTSIM was...

...tool framework, having the same look and feel of the design tools used in product **development** .

Experimental results are presented, including the validation of MTSIM **models** with high performance assemblies at Hewlett-Packard (HP). In addition, case studies of simulations, and a sensitivity analysis of the major **contributors** to manufacturing defects and cost are presented.

The significance of this research as an enabling...
...and optimize the cost of test and the quality of their products in the design **phase** , while **changes** can be effected without redesigns. Since the **models** developed in this research have the proper balance between simulation accuracy and **model** **input** **data** , MTSIM runs with **data** currently available in the manufacturing **database** and requires minimum **input** and knowledge from designers. MTSIM also enables manufacturing engineers to predict the effects of new...

25/3,K/118 (Item 8 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04938252 E.I. No: EIP98024053363
Title: Virtual process capability
Author: Mackertich, Neal A.; Stephens, Vic
Corporate Source: Raytheon Electronic Systems, Sudbury, MA, USA
Conference Title: Proceedings of the 1997 51st Annual Quality Congress, ASQC
Conference Location: Orlando, FL, USA Conference Date: 19970505-19970507
E.I. Conference No.: 47736
Source: Annual Quality Congress Transactions 1997. ASQ, Milwaukee, WI, USA. p 769-773
Publication Year: 1997
CODEN: AQCTEF
Language: English

...Abstract: five times that of later production runs. If a manufacturing organization is to gain market **share** and increase its profitability, it must explore methods of accelerating its learning curves through defect...

...methodology is to realistically simulate the manufacture of mechanically designed products by understanding their underlying **model** equations and the statistical distributions of **each** involved **contributing** parameter. Recent simulated efforts such as Boeing's well known and successful 777 airplane design dimensional management study have utilized their initial design **specifications** as a method of estimating **each** involved **model** equation **contributing** parameter. The VPC methodology effectively integrates this successful modeling approach along with one that utilizes past manufacturing capability (from like parts) and **supplier** statistical **information** . This enhancement has provided our integrated design and manufacturing engineering teams at Raytheon Aircraft with...

...improvement insights. We have conservatively estimated from our practical application of this methodology that for **each** dollar invested ten are saved. (Author abstract) 10 Refs.
Descriptors: *Process engineering; Production; **Manufacture** ; Monte Carlo methods; **Computer** simulation

25/3,K/83 (Item 31 from file: 6)
DIALOG(R)File 6:NTIS

1292798 NTIS Accession Number: AD-A177 752/3
Computer Aided Tool for Entity-Relationship Database **Design**
(Master's thesis)
Mendez, R.
Air Force Inst. of Tech., Wright-Patterson AFB, OH. School of Engineering.
Corp. Source Codes: 000805002; 012225
Report No.: AFIT/GCS/ENG/86D-5
Dec 86 103p
Languages: English Document Type: Thesis
Journal Announcement: GRAI8712
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A06/MF A01

Computer Aided Tool for Entity-Relationship Database **Design**
... thesis involved the design and implementation of a computer aided design tool to assist the **database** designer in the design process. The tool provided the **database** designer an **interactive** environment to support the creation of entity-relationship diagrams for **individual** view designs. Background **information** is provided describing the different **phases** in the **database** design process, the entity-relationship **model** and problems confronting designers when integrating **several** local views into a global view. A summary of approaches for solving the view integration problem and methods used in translating a **data model** to a **specific database** management system are also discussed in this report. Requirements definition and major design issues, with...

... in the human computer interface area, are also addressed. With the use of a standard **graphics** package, the tool provides a high degree of program portability. The result of this project is a DBMS-independent tool that aids the **database** designer in the design process.
Descriptors: *Computer aided design; * **Data bases** ; *Man computer interface; **Data** management; **Models** ; Integration; Computers; **Graphics** ; **Interactions**
Identifiers: ***Dat** a **base** management systems; NTISDODXA

25/3,K/77 (Item 25 from file: 6)
DIALOG(R)File 6:NTIS

1447669 NTIS Accession Number: NTN89-0471
Investment Analysis Software for Automated Manufacturing
(NTIS Tech Note)
Department of the Navy, Washington, DC.
Corp. Source Codes: 001840000
Jun 89 1p
Languages: English
Journal Announcement: GRAI8917
FOR ADDITIONAL INFORMATION: To discuss this effort further, contact: Dr. Stephen F. Weber, AMRF Project, Building 101-Room A-415, National Institute of Standards & Technology, Gaithersburg, MD; (301) 975-6137.
NTIS Prices: Not available NTIS

...one-page announcement of technology available for utilization. Current methods for justifying investments in automated **manufacturing equipment** generally use narrow financial criteria. Factors which may affect the competitive position of a company...

... to include non-financial and even non-quantitative criteria in their analysis. AutoMan is being **beta** -tested by forty-eight companies. AutoMan uses four steps to measure the impact of potential investments: define the decision **model** by identifying impact criteria; establish weights for the categories and for the criteria through pairwise comparisons; rate investment **alternatives** with respect to **each** criterion; and compute a weighted average rating for **each** investment **alternative** . **Several** 'starter' decision **models** which specify categories and criteria as examples are included with AutoMan. The **user** can easily apply these **models** or develop new ones with up to seven categories of impacts and up to seven criteria per category. The forty-nine criteria may be either quantitative or qualitative. **Models** can be developed, revised, selected, and applied with ease.

25/3,K/74 (Item 22 from file: 6)
DIALOG(R)File 6:NTIS

1475862 NTIS Accession Number: N90-10090/0

Modeling and Control System Design and Analysis Tools for Flexible Structures

Anissipour, A. A. ; Benson, R. A. ; Coleman, E. E.
Boeing Co., Seattle, WA.

Corp. Source Codes: 004210000; BR564481
Sponsor: National Aeronautics and Space Administration, Washington, DC.
May 89 21p
Languages: English Document Type: Journal article
Journal Announcement: GRAI9004; STAR2801
In NASA. Langley Research Center, Proceedings of the Workshop on Computational Aspects in the Control of Flexible Systems, Part 1 p 221-241.
NTIS Prices: (Order as N90-10080/1, PC A21/MF A01)

Described here are Boeing software tools used for the **development** of control laws of flexible structures. The Boeing Company has developed a software tool called Modern Control Software Package (MPAC). MPAC provides the environment necessary for linear **model development** , analysis, and controller design for large **models** of flexible structures. There are two features of MPAC which are **particularly** appropriate for use with large **models** : (1) numerical accuracy and (2) label-driven nature. With the first feature MPAC uses double...

... relies on EISPAC and LINPACK for the numerical foundation. With the second feature, all MPAC **model inputs** , outputs, and states are referenced by **user** -defined labels. This feature allows **model modification** while maintaining the same state, **input** , and output names. In addition, there is no need for the **user** to keep track of a **model** variable's matrix row and column locations. There is a wide range of **model** manipulation, analysis, and design features within the numerically robust and flexible environment provided by MPAC. **Models** can be built or **modified** using either state space or transfer function **representations** . Existing **models** can be combined via parallel, series, and feedback connections; and loops of a closed-loop **model** may be broken for analysis.

Descriptors: *Computer aided design; *Control systems design; *Flexible bodies; *Software tools; *Structural analysis; Eigenvalues; Eigenvectors; Mathematical **models** ; Reprints

25/3,K/30 (Item 30 from file: 2)
DIALOG(R)File 2:INSPEC

05275049 INSPEC Abstract Number: C9212-7160-043
Title: An approach to the construction and usage of simulation modeling in the shipbuilding industry
Author(s): Barzier, M.K.; Perry, C.J.
Author Affiliation: Systems Modeling Corp., Sewickley, PA, USA
Conference Title: 1991 Winter Simulation Conference Proceedings (Cat. No.91CH3050-2) p.455-64
Editor(s): Nelson, B.L.; Kelton, W.D.; Clark, G.M.
Publisher: IEEE, New York, NY, USA
Publication Date: 1991 Country of Publication: USA xxii+1261 pp.
ISBN: 0 7803 0181 1
Conference Sponsor: American Stat. Assoc.; ACM; IEEE; NIST; ORSA; TIMS/CS ; IIE; SCS
Conference Date: 8-11 Dec. 1991 Conference Location: Phoenix, AZ, USA
Language: English
Subfile: C

Abstract: The authors describe a two- **level** modeling approach for developing simulation **models** in the shipbuilding industry. At the shop floor **level** , a series of low- **level** **models** simulates the behaviors of **individual** hull **components** as they are **fabricated** and processed through the shop. Output from one **model** is used as **input** to the next in accordance with the appropriate manufacturing sequence. A single high- **level** **model** simulates the overall shipbuilding process, modeling the manufacturing of major assemblies as they are fabricated. Both **levels** are schedule-driven to allow for the analysis of a proposed schedule with respect to capacity requirements, inventory, throughput, etc. In addition, **each** is animated to **graphically** depict its behavior. A parallel **development** effort of the high- **level** **model** with the low- **level** **models** has provided both an initial rough-cut analysis tool for forecasting and planning and a framework for integration of the low- **level** **models** into a single implementation for detailed macro analysis.
...Identifiers: simulation **models** ; ...

...shop floor **level** ; ...

...high- **level** **model** ;
1991

25/3,K/31 (Item 31 from file: 2)
DIALOG(R)File 2:INSPEC

05203362 INSPEC Abstract Number: C9209-0110-001
Title: Experiences with an educational model **CIM**
Author(s): Divjak, S.
Author Affiliation: Fac. for Electr. & Comput. Eng., Ljubljana Univ., Yugoslavia
Conference Title: 6th Mediterranean Electrotechnical Conference. Proceedings. (Cat. No.91CH2964-5) p.1556-8 vol.2
Editor(s): Zajc, B.; Solina, F.
Publisher: IEEE, New York, NY, USA
Publication Date: 1991 Country of Publication: USA 2 vol. xxxii+1584 pp.
ISBN: 0 87942 655 1
U.S. Copyright Clearance Center Code: CH2964-5/91/0000-1556$01.00
Conference Sponsor: IEEE
Conference Date: 22-24 May 1991 Conference Location: LJubljana, Slovenia
Language: English
Subfile: C

Title: Experiences with an educational model **CIM**
Abstract: An educational project entitled 'Automatic Factory' was **introduced** by IRFOP (Regional Institute for Professional Education). The goal of the project was the specialization of the technical personnel for **specific** factories. One part of the project was oriented toward the **development** of a didactic **computer** integrated **manufacturing** (CIM) **model** . This is based on **several** PC-based workstations representing typical computer supported **departments** of a simulated factory. All workstations are connected in a simple network. The **model** includes a robot and an automatically guided vehicle, (AGV), both made by students.
...Descriptors: **manufacturing** **computer** control...

...manufacturing **data** processing
...Identifiers: didactic **computer** integrated **manufacturing** ;
1991

25/3,K/28 (Item 28 from file: 2)
DIALOG(R)File 2:INSPEC

05450962 INSPEC Abstract Number: C9309-6110B-012
Title: Specification **and implementation of cooperation paradigms for distributed applications**
Author(s): Zimmermann, M.
Author Affiliation: Johann Wolfgang Goethe Univ., Frankfurt, Germany
Conference Title: Distributed Computing, Practice and Experience. Proceedings of the Autumn 1992 OpenForum Technical Conference p.179-92
Publisher: EurOpen, Buntingford, UK
Publication Date: 1992 Country of Publication: UK ix+381 pp.
Conference Sponsor: 88Open; Cognos; Digital Equipment; BULL; IBM; et al
Conference Date: 25-27 Nov. 1992 Conference Location: Utrecht, Netherlands
Language: English
Subfile: C

Title: Specification **and implementation of cooperation paradigms for distributed applications**
Abstract: The author presents an integrated approach for the **specification** , implementation and management of distributed applications. Driven by the basic characteristics of distributed applications, he **introduces** a distributed application **model** enabling the integration of different aspects during the **development phase** of a distributed application. Based on this **model** , he explains his **specification** technique for interfaces, **components** , and application **configurations** . In order to support reusability of distributed applications, he proposes some research directions for the design of generic distributed applications. For this purpose, he **introduces** the concept of **templates** , which serves as a framework that provides a skeleton for developing distributed applications with a **specific** cooperation pattern. **Templates** are a technique for making application **specifications** as general and flexible as possible. It allows interfaces, **components** and application **configurations** to have generic parameters. During application engineering a generic distributed application is reused to construct **specific** applications, i.e. a concrete running application through an instantiation process. Based on practical examples, he demonstrates the usefulness of his approach by **specification** of **templates** for **client** server applications and different types of distributed group work applications.
...Descriptors: formal **specification** ;
...Identifiers: **specification** ; ...

... **templates**
1992

25/3,K/24 (Item 24 from file: 2)
DIALOG(R)File 2:INSPEC

05793884 INSPEC Abstract Number: C9411-7480-119
Title: A three- phase **method for feature** interaction **resolution**
Author(s): Chuan Jun Su; Mayer, R.J.; Tien-Lung Sun; Wysk, R.A.
Author Affiliation: Dept. of Ind. Eng., Texas A&M Univ., College Station, TX, USA
Journal: Journal of Design and Manufacturing vol.4, no.2 p.153-66
Publication Date: June 1994 Country of Publication: UK
CODEN: JDMAEG ISSN: 0962-4694
Language: English
Subfile: C

Title: A three- phase **method for feature** interaction **resolution**
Abstract: In a feature-oriented concurrent engineering or CIM environment, feature **interaction** problems must be addressed and resolved to provide correctly represented part **information** for use throughout the product life-cycle. The feature **interaction** problems often arise as a result of: (1) feature **modifications** by detail designers; (2) **changes** in functional requirements that conflict with established constraints; and (3) knowledge-based feature translation operations in which design based features are interpreted in another context. If improperly handled, feature **interaction** problems will result in the **representation** of incorrect or inaccurate **information** in the feature modeler. The consequence can be serious problems or errors in the subsequent...

... interference-solving methodology based upon the Extended CSG Tree Of Features (ECTOF) scheme for feature **representation** . The methodology presented is composed of three **phases** . During an **interactive** design session, the first **phase** would be automatically activated after **each** execution of a feature manipulation operation to resolve simple feature **interactions** . **Phase** 2 is intended to be activated by the **user** during the **interactive** design process to coerce the type of a feature. **Phase** 2 would **update** the feature **information** in the ECTOF. **Phase** 3 is activated automatically after the **user** has completed a design session and will **transform** an ECTOF to a new structure called a 'resolved ECTOF'. In that, unresolved intersecting features...
Descriptors: **computer** integrated **manufacturing** ; ...

...knowledge **representation** ;
Identifiers: three- **phase** method...

...feature **interaction** resolution...

...feature **modifications** ; ...

... **interactive** design
1994

25/3,K/21 (Item 21 from file: 2)
DIALOG(R)File 2:INSPEC

05895927 INSPEC Abstract Number: B9504-0170E-013, C9504-7480-074
Title: A hypertext approach to discrete event simulation: the development **of a computer-based learning tool**
Author(s): Spedding, T.A.; De Douza, R.
Author Affiliation: Sch. of Mech. & Production Eng., Nanyang Technol. Inst., Singapore
Journal: International Journal of Engineering Education vol.10, no.4 p.361-72
Publication Date: 1994 Country of Publication: West Germany
CODEN: IEEDEF ISSN: 0742-0269
U.S. Copyright Clearance Center Code: 0742-0269/94/$3.00+0.00
Language: English
Subfile: B C

Title: A hypertext approach to discrete event simulation: the development **of a computer-based learning tool**
Abstract: This paper presents an **interactive** simulation system in a hypertext environment in an attempt to develop an awareness of the...

... PC compatible computer under the Windows environment. The system provides a hierarchical combination of text, **graphics** and animation to illustrate simulation analysis. The software develops a unified and structured approach to simulation so that the **user** can work through the **information** at **several levels** , depending on their expertise or **particular** requirements. At the centre of the system is a fully developed simulation of a surface mount technology (SMT) line, which is accessible to the **user** from any point in the system. The system is therefore designed to respond to different **levels** of ability and experience, thus alleviating one of the classic problems of engineering education which...

... conceptual design of the system can be adopted in any discipline which requires a high **level** of visual and cognitive **interaction** to gain a thorough understanding of engineering principles and their applications.
...Descriptors: electronic **equipment manufacture** ; ...

... **graphical user** interfaces...

... **interactive** systems
...Identifiers: **interactive** simulation system...

... **graphics** ; ...
...cognitive **interaction** ; ...

...visual **interaction**
1994

25/3,K/16 (Item 16 from file: 2)
DIALOG(R)File 2:INSPEC

06483006 INSPEC Abstract Number: C9703-1290F-022
Title: Quantifying the relative improvements of redesign strategies in a PC supply chain
Author(s): Berry, D.; Naim, M.M.
Author Affiliation: Logistics Syst. Dynamics Group, Univ. of Wales Coll. of Cardiff, UK
Journal: International Journal of Production Economics Conference Title: Int. J. Prod. Econ. (Netherlands) vol.46-47 p.181-96
Publisher: Elsevier,
Publication Date: Dec. 1996 Country of Publication: Netherlands
CODEN: IJPEE6 ISSN: 0925-5273
SICI: 0925-5273(199612)46/47L.181:QRIR;1-L
Material Identity Number: P531-97001
U.S. Copyright Clearance Center Code: 0925-5273/96/$15.00
Conference Title: Eighth International Working Seminar on Production Economics
Conference Date: 21-25 Feb. 1994 Conference Location: Innsbruck, Austria
Language: English
Subfile: C

Abstract: The paper outlines the **development** of simulation **models** that describe the dynamic implications of various supply chain redesign strategies adopted by a major European **manufacturer** of personal **computers** (PCs). The strategies adopted in the real world supply chain, and replicated in the simulation **models** , are the **introduction** of the just-in-time philosophy in manufacturing plants, the **development** of a global materials planning system that attains visibility of total supply chain stock, a strategic **supplier** sourcing policy and the by-passing of the distribution network so as to directly interface with the **customer** . Simulation results suggest that dynamic performance improvements (which have an impact on **customer** service **level** achievement, stock holding requirements and production on-costs) were achieved by **each** consecutive redesign strategy. The paper concludes that the simulations are useful in educating and **informing** supply chain designers in other supply chains of the relative dynamic benefits of different supply...
...Identifiers: European PC **manufacturer** ; ...

...simulation **models** ; ...

...strategic **supplier** sourcing policy
1996

25/3,K/15 (Item 15 from file: 2)
DIALOG(R)File 2:INSPEC

06492581 INSPEC Abstract Number: C9703-7480-044
Title: A data **management** model **for design** change **control**
Author(s): Krishnamurthy, K.; Law, K.H.
Author Affiliation: Dept. of Civil Eng., Stanford Univ., CA, USA
Journal: Concurrent Engineering: Research and Applications vol.3, no.4 p.329-43
Publisher: Technomic Publishing,
Publication Date: Dec. 1995 Country of Publication: USA
CODEN: CRAPEM ISSN: 1063-293X
SICI: 1063-293X(199512)3:4L.329:DMMD;1-9
Material Identity Number: F356-97003
U.S. Copyright Clearance Center Code: 1063-293X/95/040329-15$10.00/0
Language: English
Subfile: C

Title: A data **management** model **for design** change **control**
Abstract: This paper presents a **data** management **model** to support collaborative design environments. **Specifically** the proposed **model** describes a multidisciplinary project in terms of the independent **evolution** of designs from the **participating** disciplines. The **model** monitors independent design activities by systematically tracking component descriptions in the **individual** disciplines. Projects are coordinated through asynchronous communication of design **changes** . This paper discusses two salient features of the given **model** . First, we specify a three-layered closely coupled framework of versions, assemblies, and configurations. In this framework, versions maintain evolving descriptions of primitive entities within a single discipline. **Assemblies** integrate **component** instances to describe more complex entities, as well as designs within single disciplines. Configurations provide a framework to describe an overall project design that is composed of designs from **multiple** disciplines. Secondly, we **introduce** equivalent operations as single **data** operations that summarize the effect of a sequence of **changes** on an instance description, and apply this concept to detect, store, and manage **changes** among versions of a primitive entity. The close coupling of the version, assembly, and configuration **levels** enables **changes** at various assembly and configuration **levels** to be characterized by recursively combining **changes** computed at the version **level** . We use a simple example of a multidisciplinary facility design project to demonstrate the **change** management capabilities of the **model** . This example has been tested on a **prototype** implementation in the AUTOCAD environment using AUTOLISP as the programming interface.
Identifiers: **data** management **model** ; ...
...design **change** control
1995

25/3,K/13 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC

06588808 INSPEC Abstract Number: C9707-7400-004
Title: A data **management** model **for collaborative design in a CAD environment**
Author(s): Krishnamurthy, K.; Law, K.H.
Author Affiliation: Dept. of Civil Eng., Stanford Univ., CA, USA
Journal: Engineering with Computers vol.13, no.2 p.65-86
Publisher: Springer-Verlag,
Publication Date: 1997 Country of Publication: USA
CODEN: ENGCE7 ISSN: 0177-0667
SICI: 0177-0667(1997)13:2L.65:DMMC;1-X
Material Identity Number: J523-97002
U.S. Copyright Clearance Center Code: 0177-0667/97/$2.00+0.20
Language: English
Subfile: C

Title: A data **management** model **for collaborative design in a CAD environment**
Abstract: This paper presents a **data** management **model** to support collaborative design. More **specifically** , it addresses the storing and managing of **changes** among designers in a multidisciplinary design project. We propose a three-layered **model** of versions, assemblies, and configurations. Versions maintain evolving descriptions of primitive entities within a single discipline. **Assemblies** integrate **component** instances to describe more complex entities, as well as designs within **individual** disciplines. Configurations provide a framework to represent an overall project design which is composed of designs from the **participating** disciplines. We apply a concept of equivalent operations for developing operators that store, detect and manage **changes** among versions of a primitive design entity. The close coupling of the version, assembly, and configuration layers enables computed version **changes** to be recursively combined to characterize **changes** at the assembly and configuration **levels** . This applies for both project coordination through asynchronous communication of **changes** among designers, and project monitoring through systematic tracking of evolving project descriptions. This paper also presents an implementation of the **data** management **model** in a CAD paradigm. We use a simple multidisciplinary facility design example to demonstrate the **change** management capabilities of the proposed **model** . This example has been tested on a **prototype** implementation in an AUTOCAD environment.
...Descriptors: **data** handling
...Identifiers: **data** management **model** ; ...
...three-layered **model** ; ...

... **change** management
1997

25/3,K/10 (Item 10 from file: 2)
DIALOG(R)File 2:INSPEC

06938975 INSPEC Abstract Number: C9807-7480-107
Title: Supporting manufacturing with simulation: model design, development , and deployment
Author(s): Chance, F.; Robinson, J.; Fowler, J.
Author Affiliation: Chance Ind. Solutions, Dublin, CA, USA
Conference Title: 1996 Winter Simulation Conference Proceedings p. 114-21
Editor(s): Charnes, J.M.; Morrice, D.J.; Brunner, D.T.; Swain, J.J.
Publisher: SCS Int, San Diego, CA, USA
Publication Date: 1996 Country of Publication: USA xxxi+1527 pp.
ISBN: 0 7803 3383 7 Material Identity Number: XX98-00153
Conference Title: Proceedings of 1996 Winter Simulation Conference Proceedings
Conference Sponsor: American Statistical Assoc.; ACM; INFORMS; IEEE; IIE; NIST; SCS
Conference Date: 8-11 Dec. 1996 Conference Location: Coronado, CA, USA
Language: English
Subfile: C

Title: Supporting manufacturing with simulation: model design, development , and deployment
...Abstract: industrial and consulting experiences. Using these projects as motivation, we discuss the ideal project lifecycle- **model** design, **development** and deployment. For **model** design, we emphasize the importance of a clear and consistent **specification** , articulated in a written document. This **specification** should identify project **customers** , goals and deliverables. We next review a range of **model development** options, stressing the existence of **many** non-simulation **alternatives** . We also discuss methods for **model** verification and validation. Finally, we consider the difficulties of **model** deployment, including simulation output analysis, **data** maintenance and **model** integration. We close with **several** suggestions on how best to present simulation results to a management audience.
Descriptors: **computer** integrated **manufacturing** ;
...Identifiers: **model** design...

... **model development** ; ...

... **model** deployment...

... **specification** ; ...
... **model** verification...

... **model** validation...

... **data** maintenance...

... **model** integration
1996

25/3,K/203 (Item 42 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

924814 ORDER NO: AAD86-16978
THE IMPACT OF MANAGEMENT ON THE INTRODUCTION **OF PROCESS TECHNOLOGY IN A PROCESS-ORIENTED FIRM**
Author: RADFORD, RUSSELL WAYNE
Degree: D.B.A.
Year: **1986**
Corporate Source/Institution: HARVARD UNIVERSITY (0084)
Source: VOLUME 47/05-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 1810. 351 PAGES

THE IMPACT OF MANAGEMENT ON THE INTRODUCTION **OF PROCESS TECHNOLOGY IN A PROCESS-ORIENTED FIRM**
Year: **1986**

Suggested solutions to the perceived non-competitiveness of U.S. **manufacturers** invariably include **changes** in products and processes. These solutions assume that these **changes** will be implemented in manufacturing organizations with no difficulty. This empirical research investigates the manner in which productive units assimilate **change** , and the internal conditions influencing the rate at which **change** is accepted.

It is hypothesized that the ability to assimilate **change** is dependant on the management's impact is through the ability to influence the **development** of, and use of, technological capability disembodied technology--within the productive unit. **Several** managerially-influenced proxies for technological capability are defined, and a **model** developed in which the impact of **change** in **manufacturing** capital **equipment** on productive unit performance is mediated by the various technological proxies.

Tested on a **data base** consisting of 66 months operating **data** from all **departments** in the five plants in one process-oriented manufacturing firm, the **model** shows that, while **changes** in **manufacturing equipment** have a positive impact on performance, the intervening variables significantly reduce this impact.

Using a...

...three capital equipment projects are reviewed to determine the influence of management on technological capability **development** , and hence on performance improvement. Two of these experiments used matched sets of productive units. By mapping the **levels** of management characteristics in **each** unit onto the impact of **each** project on the **individual** unit's performance, consistent relationships between management characteristics and productive unit performance can be seen.

While the research has **several** interesting findings, including the somewhat paradoxical finding that the productive units with better longer term...

25/3,K/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

07268286 INSPEC Abstract Number: C1999-07-7480-056
Title: Developing an integrated intelligent framework to support an engineering change **process for an axial piston pump**
Author(s): Ou-Yang, C.; Chang, C.W.
Author Affiliation: Dept. of Ind. Manage., Nat. Taiwan Inst. of Technol., Taipei, Taiwan
Journal: International Journal of Advanced Manufacturing Technology vol.15, no.5 p.345-55
Publisher: Springer-Verlag,
Publication Date: 1999 Country of Publication: UK
CODEN: IJATEA ISSN: 0268-3768
SICI: 0268-3768(1999)15:5L.345:DIIF;1-D
Material Identity Number: J700-1999-005
U.S. Copyright Clearance Center Code: 0268-3768/99/$2.00+0.20
Language: English
Subfile: C

Title: Developing an integrated intelligent framework to support an engineering change **process for an axial piston pump**
Abstract: Since the concepts of concurrent engineering were **introduced** in mid 1980s, the product design process has become complicated. This is because **many** factors related to the life cycle of the product may need to be considered during the design **stage** . Therefore, shortening product **development** time becomes important for the survival of an enterprise. In this paper, an integrated intelligent...

... support concurrent engineering is proposed. Two major modules are provided by this system to assist **change** management. One is a constraint network module that analyses the related constraints about a design **change** to find the design variables influenced. Another is a product **assembly module** that extracts the design **data** from a CAD **database** to analyse the spatial relationships relating to an assembly. The **data** in the above two modules are integrated in a **data** integrated module, in which an entity relational **data model** was developed to describe the integrated **data** . Finally, a Web-based query system was developed to provide a **multiplatform** environment for the user to refer to the **data** in the constraint network **module** and the product **assembly module** during a design **change** process. The proposed environment is implemented in the design **change** process for an axial piston pump.
...Descriptors: **information** resources...

...product **development** ; ...
...visual **databases**
...Identifiers: engineering **change** process...

...product **development** time...

... **change** management...

...product **assembly module** ; ...

...CAD **database** ; ...

... **data** integrated module...

...entity relational **data** **model** ; ...

... **multiplatform** environment
1999

25/3,K/34 (Item 34 from file: 2)
DIALOG(R)File 2:INSPEC

04966121 INSPEC Abstract Number: B91055822, C91059870
Title: Hierarchical real-time scheduling of a semiconductor fabrication facility
Author(s): Bai, X.; Srivatsan, N.; Gershwin, S.B.
Author Affiliation: Dept. of Mech. Eng., MIT, Cambridge, MA, USA
Conference Title: Ninth IEEE/CHMT International Electronic Manufacturing Technology Symposium. Competitive Manufacturing for the Next Decade. Proceedings 1990 IEMT Symposium (Cat. No. 90CH2864-7) p.312-17
Publisher: IEEE, New York, NY, USA
Publication Date: 1990 Country of Publication: USA x+370 pp.
U.S. Copyright Clearance Center Code: CH2864-7/90/0000-0312$01.00
Conference Sponsor: IEEE
Conference Date: 1-3 Oct. 1990 Conference Location: Washington, DC, USA
Language: English
Subfile: B C

...Abstract: experimental implementation in a semiconductor research laboratory are described. Its purpose is to aid the **development** of algorithms for real-time decision-making in a manufacturing enterprise in which such disruptive events as machine failures, material absences, expedited items, engineering **changes** , fluctuations of demand, and setups play a role. The hierarchy is divided into a set of **levels** that correspond to events that occur at very different frequencies. At **each level** , decisions are made in a way that satisfies the capacity constraints that are appropriate to that **level** and that meet objectives determined at higher **levels** . These decisions are either actions, such as the loading of a part of the **initiation** of a setup, or objectives to be issued to lower **levels** . The integration of the scheduler with the systemwide **database** , the structure of the scheduler as determined by the time constants and process flows in...
...Descriptors: manufacturing **data** processing...

...semiconductor **device manufacture**
...Identifiers: engineering **changes** ; ...

...systemwide **database** ;
1990

25/3,K/38 (Item 38 from file: 2)
DIALOG(R)File 2:INSPEC

04754044 INSPEC Abstract Number: C90071964
Title: Integrating IBIS simulations and systems planning models **through** multiple model **communications**
Author(s): Ketcham, M.G.; Rajagopalan, R.
Author Affiliation: Dept. of Ind. Eng. & Oper. Res., Massachusetts Univ., Amherst, MA, USA
Conference Title: 1989 Winter Simulation Conference Proceedings (Cat. No.89CH2778-9) p.834-9
Editor(s): MacNair, A.; Musselman, K.J.; Heidelberger, P.
Publisher: SCS, San Diego, CA, USA
Publication Date: 1989 Country of Publication: USA xx+1139 pp.
ISBN: 0 911801 58 8
Conference Sponsor: IEEE; American Stat. Assoc.; ACM; Inst. Ind. Eng.; NIST; ORSA; Inst. Manage Sci.; SCS
Conference Date: 4-6 Dec. 1989 Conference Location: Washington, DC, USA
Language: English
Subfile: C

Title: Integrating IBIS simulations and systems planning models **through** multiple model **communications**
Abstract: A description is given of a **multiple** -process, **multiple** -windowed environment that allows **users** to **interact** with **several** **models** concurrently, including IBIS simulations. One goal in designing this environment is the transparent integration of simulation with other types of **models** , such as mathematical **models** for production planning. Its capabilities include **interactive** **development** of experiment **specifications** , automatic **reconfiguration** of simulations based on **changing** system **specifications** , and concurrent execution of simulations and production scheduling **models** to provide a detailed analysis of system capacities. Concurrent execution is controlled through techniques for **multiple** **model** communication.
Descriptors: **manufacturing** **computer** control...

...manufacturing **data** processing
...Identifiers: systems planning **models** ; ...

... **multiple** **model** communications...

... **multiple** -windowed environment...

...mathematical **models** ; ...
... **interactive** **development** ; ...

...automatic **reconfiguration**
1989